

## A MARCH BIRD COUNT IN POONA<sup>1</sup>

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How many birds are there in an Indian city? To arrive at an estimate of the bird population of the city, a group of twenty bird-watchers from Poona decided to pool their energies to make a bird-count. The city was divided into sectors and a pair or group of bird-watchers was allotted one sector to make notes and count species and individuals. All birds that could be seen and heard (and definitely identified) while moving along the streets and lanes were counted. There are certain groups of trees in the city and on its river-banks which are favoured by birds for roosting. Counts of common Indian mynah, house and jungle crow, cattle and little egrets and pond herons were chiefly made at these places.

It was not possible to cover the city area in one day. Sectors had to be divided into sub-sectors. Each sub-sector was visited once to avoid double counting. Of course, a certain percentage of double counting is unavoidable as birds are highly mobile. However, care was taken to avoid it, mainly by restricting the count of such mobile birds as crows and mynahs to their roosting sites only. The total effort was spread over the duration of a week—the first week of March 1979.

During the week 130 bird-species were noted with a total population of more than 22,000 individuals. The count was spread over about 12,120 hectares or about 30,000 acres. The

area includes the main wards of the city and the cantonment but excludes suburban areas such as Kirkee, Yerawada, Ghorpadi, Katraj, Hingne and some other small areas on the periphery. Out of the total area included in the bird-count about 60% was more or less fully covered, 24% partially covered, while over about 16% of the area observations were poor. Our coverage of garden birds was poor for obvious reasons. We could not enter private gardens and had to restrict counting to public parks and gardens only.

The total of about 22,000 birds counted gives a figure of less than one bird per acre or 1.8 birds per hectare. The actual number of birds per hectare is probably greater. As already pointed out, our coverage of garden birds was poor. Even if the number of garden birds is increased by 100 p.c., we will still be erring on the safe side. Our coverage of water-birds and birds of grasslands and fields, is better, believed to be around 60 p.c. This also includes common birds like house sparrow, house and jungle crow and common mynah. A 40 p.c. increase in the number of all these birds may not probably be out of proportion. These adjustments give us a total of about 32000 birds, i.e. 1.06 birds per acre or 2.6 birds per hectare. Comparable figures for other Indian cities are not available. However, for Inner London area a density of 0.9 to 1.75 breeding pairs per acre, has been given by Murton (Murton R. K. MAN & BIRDS, 1971).

It must be made clear that the figure includes migratory birds, both local and conti-

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mental. A count taken in June and July will probably show a lower density as most of the migratory birds will have left by then. However, these migrants spend almost eight months of the year (September to April) in our land and there is no reason why we should exclude them while estimating the bird population of a particular area.

Admittedly, the count was weighted in favour of birds which are commensals of man namely house sparrow and crow, mynah and parakeet, pariah kite and blue rock pigeon. In Murton's figures also 88 p.c. of the breeding birds are feral pigeons and house sparrows. Here, the common Indian mynah formed almost a third of the total number of individuals. The mynah outnumbered the crow and the sparrow by almost 2 to 1. Not all the mynahs forage within the city however. They are commuters, flying out every morning to fields and grasslands to feed and flying in to roost each evening. We were surprised to find the number of house sparrows so low (1600). Probably these drab-coloured birds failed to attract our attention. Big flocks of sparrows were seen mainly in the evening when numbers collected and flew to roost. One roosting tree near the railway station attracted more than 500 of them.

Even crows were found to be more numerous than the house sparrow. About 2500 of them were counted. It was not always possible to distinguish between a house and a jungle crow, as counts were made mainly in the evenings. We suspect however, that there are as many jungle crows as there are house crows.

Early in the morning crows appeared to be the first to wake up and move about; while in the evening they were preceded by the common mynah for roosting. They flew in to roost in flocks of 20-30 or gangs of 5-10, in a leisurely fashion, flying at about tree-top height.

Sometimes they used to make a sudden stoop on to a tree on the way, the flying army arresting flight suddenly and diving down to alight on the tree to the accompaniment of much noise. After a pause they continued their flight. They also perched on adjacent buildings before settling on the roosting trees. Even after reaching these trees some took to wing, flew about, made a detour only to come back to settle on the trees.

The common mynah roosts were nothing short of spectacular. At one roost more than 4000 mynahs were counted. They flew in to roost in flocks of 2-4, 7-8, 20-30 and 30-50. Most of them flew at moderate heights, though some coming into city from the west over the hills flew higher. Before reaching the trees mynahs too collected first in a convenient spot, a hill-slope, a grassy patch on a river-bank, even a tall theatre-building. Here they made a pause of 15 to 30 minutes before flying in *en masse* into the trees to the accompaniment of a deafening cackle.

House and jungle crows were found to be associating with common mynahs on all the roosts; while at one roost near the river about 350 cattle and little egrets and 325 pond herons came to roost with the mynahs and crows. They however, occupied acacia trees while the latter roosted on the banyan, the peepul and the rain tree. Egrets came in flocks of 10 to 25 birds, flying along the course of the river, while pond herons came one by one. Brahminy mynahs have smaller roosts scattered all over the city. They do not associate with the common mynah but roost separately in groups of 5 to 50. Normally in the first fortnight of March every year, rosy pastors arrive and spend some days in the city. They also were seen to roost with the common mynah. 400 were counted at one roost alone.

While the mynah roosts are mostly in the

## BIRD COUNT IN POONA

central, southern and western parts of the city, the rose-ringed parakeet prefers chiefly the Koregaon Park area to the east. In the evening they were seen to fly energetically in groups of 20-40 birds to settle in large banyan and peepul trees. Smaller groups coalesced into larger ones as roosting trees drew near and they used to settle with an incessant chatter which normally went on with interruptions till late at night. They appear to be late-risers too, leaving the roost after sunrise when most of the other birds are up and about. More than 1000 parakeets roost there.

As in other Indian cities some pariah kites and whitebacked vultures are usually to be seen quartering the skies of Poona city. Kites were found to be numerous in the Cantonment area and in early mornings these handsome birds were very active, diving, swooping on the ground for tit-bits and squealing. Breeding season of these birds was on and on a busy thoroughfare a nest with a sitting bird could easily be seen on a peepul tree about 10 metres up from the street level. Most of the vultures scavenge near the bone-crushing plant located at south-east of the city. Compared to whitebacked vultures, the number of neophron vultures was insignificant.

Out of the 130 species counted, 35 may be called garden and woodland birds which including bulbuls, magpie and Indian robins, sunbird, barbet, warblers, flycatchers, tit, woodpecker, flowerpecker, koel, golden oriole, iora, grey hornbill, white-eye, little minivet, spotted owl etc. 37 species belonged to grass-land, scrub and fallow-land. These included drongo, shrikes, babblers, munias, quails, bushchats, pipits, larks, doves, bee-eater, hoopoe, Indian roller, yellow-wattled lapwing, crested bunting etc. Ten species of birds of prey were recorded. They included three eagle species, blackwinged and large Indian kite, kestrel,

shikra, sparrow-hawk, redheaded merlin and marsh harrier.

Poona's river banks harbour a rich variety of bird-life; 110 species have so far been recorded in the Mula-Mutha Bird Sanctuary area alone. During the present count 39 species of water-birds were recorded. These included dabchick, kingfishers, wagtails, coots, terns, egrets, swallows, ducks like garganey teal and pintail, and a variety of waders such as black-winged stilt, sandpipers, green and redshanks, little ringed plover, little stint, jacanas etc.

Out of the 130 bird species, 90 species were resident birds and the remaining migratory. Of the latter 18 are known to breed within Indian limits, but migrate either locally from the north or from the Himalayas. These included Indian Roller, collared bushchat, black-winged stilt, black redstart, blue rock thrush, lesser whistling teal etc. Species that habitually migrate over long distances numbered 22. They are winter visitors to our land and included ducks like garganey teal and pintail, wagtails, rosy pastors, desert wheatears etc.

What other peculiarities of bird-life could be noted during the count? As the breeding season was approaching songsters were slowly getting into form. Though the redvented bulbul and the magpie robin were not yet in full song, calls of iora and golden oriole could be heard. The koel was making feeble attempts to produce its characteristic call; the male would burst into his full song towards the end of the month. Surprisingly, a hawk-cuckoo was vocal in a park even though the weather was clear and sunny.

Pair-formation was still in its initial stages. The male magpie robin chased the female desultorily and without any fervour. The Indian robin had paired already but feeding of the female by the male could not yet

be observed. The rufous-backed shrike uttered harsh notes from a tree or a telegraph cable as if proclaiming territorial rights but his mate was nowhere nearby. The purple sunbird was not yet in full breeding plumage and the male and the female foraged separately.

Cattle and little egrets and pond herons and pheasant-tailed jacanas were also not yet in breeding plumage. However, some dabchick pairs were busy constructing their floating nests near the far end of a reed-bed; while one pair of dabchick had already laid and was incubating a clutch of two eggs. On a steep bank even a small blue kingfisher was seen excavating a nest-hole.

Most of the migrants were still to be found in the city. The Indian redstart was still here though most would leave by the 10th. Blyth's reed and greenish leaf warblers could still be heard in the trees and in the morning the brilliant blossom of the silk cotton attracted hordes of chattering rosy pastors who would proceed north around 15th March. The blue rock thrush still lurked in the eaves of tall buildings and on hills and among boulders on the river bank. The Indian roller on the telegraph pole, the collared bush-chat on a bush-top, a bluethroat in a reed-bed and a lesser whitethroat skulking in bushes, was still a common sight. Some of the yellow wag-tails had donned their distinctive dress and the greyheaded, the blueheaded and the blackheaded could be distinguished. Even some of the blackwinged stilts had put on their black caps, their restless flocks flying to and fro on the river. Most of the other waders appeared a shade brighter but still hunted singly or in flocks. Gatherings of common swallows hawked insects in the sky morning and evening though the number of red-rumped swallows appeared to be surprisingly low.

Moreover, there was a large influx of ducks, presumably returning from the south, in the Mula-Mutha Bird Sanctuary and the Pashan reservoir. The number of garganey teals had shot up from a hundred to over 500. Some pintails and redcrested pochards could also be seen among them. At this time and at this time only, a flock of lesser whistling teals visits Pashan reservoir every year. It was dutifully there this year also.

On the outskirts of the city, song of the redwinged bushlark and the Indian skylark was increasingly evident. On barren patches pairs of yellow-wattled lapwing could be seen silently creeping away from the observer. Here they will lay in the first week of April. Flocks of spotted and red munias gathered seeds quietly in grassland and along dusty tracks and baya flocks zoomed from tree to tree as if in search of a suitable nesting place.

A short-toed eagle, a few blackwinged kites and an occasional tawny eagle are usually to be seen on the periphery of the city. The great army of tawny eagles that at one time patronised the garbage dump is now no longer there. A large Indian kite, a booted eagle and a few marsh harriers were recorded on the river and reservoirs, while a kestrel, a shikra and a sparrowhawk were encountered in better wooded areas. Interestingly, for the last three years a pair of redheaded merlins have nested on the market-place tower in the busiest and most densely populated part of the city.

Such is the glimpse in the life of birds of a busy Indian city. For us city-dwellers it was an exciting and thrilling experience to count birds and record their characteristics. As the city continues to grow it will unwittingly affect the lives of its birds, until a stage comes when its citizens may feel like having a second look at the birds living in it.

BIRD COUNT IN POONA

TABLE I

LIST OF BIRDS OBSERVED DURING THE BIRD-COUNT

Scientific Name	English Name
1. <i>Podiceps ruficollis</i>	Indian Little Grebe
2. <i>Phalacrocorax niger</i>	Little Cormorant
3. <i>Ardeola grayii</i>	Indian Pond Heron
4. <i>Bubulcus ibis</i>	Cattle Egret
5. <i>Egretta intermedia</i>	Indian Smaller Egret
6. <i>Egretta garzetta</i>	Little Egret
7. <i>Dendrocygna javanica</i>	Lesser Whistling Teal
8. <i>Anas querquedula</i>	Garganey Teal
9. <i>Nettapus coromandelianus</i>	Cotton Teal
10. <i>Anas acuta</i>	Pintail
11. <i>Elanus caeruleus</i>	Blackwinged Kite
12. <i>Milvus migrans</i>	Common Pariah Kite
13. <i>Milvus migrans lineatus</i>	Large Indian Kite
14. <i>Butastur teesa</i>	White-eyed Buzzard
15. <i>Gyps bengalensis</i>	White-backed Vulture
16. <i>Neophron percnopterus</i>	White Scavenger Vulture
17. <i>Circus aeruginosus</i>	Marsh Harrier
18. <i>Circus gallicus</i>	Short-toed Eagle
19. <i>Spilornis cheela</i>	Crested Serpent Eagle
20. <i>Aquila rapax</i>	Tawny Eagle
21. <i>Falco chicquera</i>	Red-headed Merlin
22. <i>Falco tinnunculus</i>	Kestrel
23. <i>Accipiter badius</i>	Shikra
24. <i>Hieraëtus pennatus</i>	Booted Hawk Eagle
25. <i>Accipiter nisus</i>	Sparrow-hawk
26. <i>Perdicula argoondah</i>	Rock Bush Quail
27. <i>Amaurornis akool</i>	Brown Crake
28. <i>Amaurornis phoenicurus</i>	Whitebreasted Waterhen
29. <i>Gallinula chloropus</i>	Indian Moorhen
30. <i>Fulica atra</i>	Coot
31. <i>Porphyrio porphyrio</i>	Purple Moorhen
32. <i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana
33. <i>Vanellus indicus</i>	Red-wattled Lapwing
34. <i>Vanellus malabaricus</i>	Yellow-wattled Lapwing
35. <i>Charadrius dubius</i>	Little-ringed Plover
36. <i>Tringa totanus</i>	Redshank
37. <i>Tringa nebularia</i>	Greenshank
38. <i>Tringa ochropus</i>	Green Sandpiper
39. <i>Tringa glareola</i>	Wood Sandpiper
40. <i>Tringa hypoleucos</i>	Common Sandpiper
41. <i>Capella gallinago</i>	Common Snipe
42. <i>Calidris minutus</i>	Little Stint
43. <i>Philomachus pugnax</i>	Ruff & Reeve
44. <i>Himantopus himantopus</i>	Black-winged Stilt

Scientific Name	English Name
45. <i>Rostratula benghalensis</i>	Painted Snipe
46. <i>Chlidonias hybrida</i>	Whiskered Tern
47. <i>Gelochelidon nilotica</i>	Gull-billed Tern
48. <i>Columba livia</i>	Blue Rock Pigeon
49. <i>Streptopelia chinensis</i>	Spotted Dove
50. <i>Streptopelia senegalensis</i>	Little Brown Dove
51. <i>Psittacula krameri</i>	Roseringed Parakeet
52. <i>Psittacula cyanocephala</i>	Blossom-headed Parakeet
53. <i>Cuculus varius</i>	Common Hawk-cuckoo
54. <i>Eudynamis scolopacea</i>	Koel
55. <i>Centropus sinensis</i>	Crow-pheasant
56. <i>Athene brama</i>	Spotted Owllet
57. <i>Apus affinis</i>	House Swift
58. <i>Halcyon smyrnensis</i>	White-breasted Kingfisher
59. <i>Alcedo atthis</i>	Common Kingfisher
60. <i>Ceryle rudis</i>	Lesser Pied Kingfisher
61. <i>Merops orientalis</i>	Small Green Bee-eater
62. <i>Coracias benghalensis</i>	Indian Roller
63. <i>Upupa epops</i>	Hoopoe
64. <i>Tockus birostris</i>	Grey Hornbill
65. <i>Megalaima haemacephala</i>	Crimson-breasted Barbet
66. <i>Picoides mahrattensis</i>	Mahratta Woodpecker
67. <i>Eremopterix grisea</i>	Ashy-crowned Finchlark
68. <i>Ammomanes phoenicurus</i>	Rufous-tailed Finchlark
69. <i>Galerida malabarica</i>	Malabar Crested Lark
70. <i>Mirafra erythroptera</i>	Red-winged Bushlark
71. <i>Alauda gulgula</i>	Eastern Skylark
72. <i>Hirundo concolor</i>	Dusky Crag Martin
73. <i>Hirundo rustica</i>	Eastern Swallow
74. <i>Hirundo daurica</i>	Red-rumped Swallow
75. <i>Hirundo smithii</i>	Wire-tailed Swallow
76. <i>Lanius vittatus</i>	Bay-backed Shrike
77. <i>Lanius schach</i>	Rufous-backed Shrike
78. <i>Lanius excubitor</i>	Grey Shrike
79. <i>Oriolus oriolus</i>	Indian Oriole
80. <i>Dicrurus adsimilis</i>	Black Drongo
81. <i>Sturnus pagodarum</i>	Brahminy Myna
82. <i>Sturnus roseus</i>	Rosy Pastor
83. <i>Acridotheres tristis</i>	Common Myna
84. <i>Acridotheres fuscus</i>	Jungle Myna
85. <i>Corvus splendens</i>	House Crow
86. <i>Corvus macrorhynchos</i>	Jungle Crow
87. <i>Coracina melanoptera</i>	Black-headed Cuckoo-shrike
88. <i>Pericrocotus cinnamomeus</i>	Small Minivet
89. <i>Aegithina tiphia</i>	Common Iora
90. <i>Pycnonotus jocosus</i>	Red-whiskered Bulbul
91. <i>Pycnonotus cafer</i>	Red-vented Bulbul

BIRD COUNT IN POONA

Scientific Name	English Name
92. <i>Turdoides malcolmi</i>	Large Grey Babbler
93. <i>Turdoides striatus</i>	Jungle Babbler
94. <i>Chrysomma sinensis</i>	Yellow-eyed Babbler
95. <i>Muscicapa parva</i>	Red-breasted Flycatcher
96. <i>Rhipidura aureola</i>	White-browed Fantail Flycatcher
97. <i>Cisticola juncidis</i>	Streaked Fantail Warbler
98. <i>Prinia subflava</i>	Indian Wren Warbler
99. <i>Prinia socialis</i>	Ashy Wren Warbler
100. <i>Orthotomus sutorius</i>	Tailor Bird
101. <i>Acrocephalus stentoreus</i>	Great Reed Warbler
102. <i>Acrocephalus dumetorum</i>	Blyth's Reed Warbler
103. <i>Prinia hodgsonii</i>	Franklin's Wren Warbler
104. <i>Phylloscopus trochiloides</i>	Greenish Leaf Warbler
105. <i>Sylvia curruca</i>	Lesser Whitethroat
106. <i>Erithacus svecicus</i>	Blue-throat
107. <i>Copsychus saularis</i>	Magpie Robin
108. <i>Saxicola caprata</i>	Pied Bushchat
109. <i>Saxicola torquata</i>	Stone Chat
110. <i>Saxicoloides fulvicata</i>	Indian Robin
111. <i>Oenanthe deserti</i>	Desert Wheatear
112. <i>Monticola solitarius</i>	Blue Rock Thrush
113. <i>Phoenicurus ochrurus</i>	Black Redstart
114. <i>Parus major</i>	Grey Tit
115. <i>Anthus similis</i>	Brown Rock Pipit
116. <i>Anthus trivialis</i>	Tree Pipit
117. <i>Motacilla caspica</i>	Grey Wagtail
118. <i>Motacilla flava beema</i>	Blue-headed Yellow Wagtail
119. <i>Motacilla citreola</i>	Yellow-headed Wagtail
120. <i>Motacilla alba</i>	White Wagtail
121. <i>Motacilla inaderaspatensis</i>	Large Pied Wagtail
122. <i>Dicaeum erythrorhynchos</i>	Tickell's Flowerpecker
123. <i>Nectarinia zeylonica</i>	Purple-rumped Sunbird
124. <i>Nectarinia asiatica</i>	Purple Sunbird
125. <i>Zosterops palpebrosa</i>	White-eye
126. <i>Passer domesticus</i>	House Sparrow
127. <i>Ploceus philippinus</i>	Weaver Bird
128. <i>Lonchura malabarica</i>	White-throated Munia
129. <i>Lonchura punctulata</i>	Spotted Munia
130. <i>Estrilda amandava</i>	Red Munia

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